ENTOMOLOGY.—*New Cantharidae (Coleoptera) from the collection of the United States National Museum.*[1] W. WITTMER. (Communicated by Oscar L. Cartwright.)

The following descriptions are based on material submitted to the author for identification by the United States National Museum, Washington, D. C. All holotypes are in the collection of that museum.

Discodon humeropictum, n. sp.

Black-brown, only one oblong extremely narrow, yellow spot on the humeral calli, touching the base and frequently also extending to the apices of the elytra. Mandibles red-brown. Head with the eyes nearly as wide as the pronotum, rather densely, finely punctate and pubescent. Antennae projecting a little beyond the base of the hind coxae, second segment hardly longer than wide, the third a trifle shorter than the fourth, seventh to tenth with a short distinct longitudinal groove. Pronotum somewhat wider than long, the sides weakly narrowed anteriorly, lateral notch indicated by a weak impression a little before the middle, median line in the basal half distinct, punctuation much finer and less distinct than on the head. Elytra with a rugose effect and with traces of two longitudinal costae. Length: 6.5–7.5 mm.

Type.—Holotype male, U.S.N.M. 62348. Allotype in author's collection.

Type locality.—Huanuco, Peru. Specimens collected August 31, 1928, by A. J. Barton, no. 239.28.

This new species belongs to the group of very few species with unicolorously black pronotum; it is somewhat reminiscent of the darkest forms of *D. obscuricolle* Wittmer, whose pronotum, however, is always somewhat pale, at least in the basal angles. The antennae differ: in *humeropictum* segments 7 to 10 are indented with a longitudinal groove; in *obscuricolle* segments 4 to 10 are thus marked.

Discodon arnetti, n. sp.

MALE. Deep black, pronotum yellow with a triangular black-brown spot whose apex is turned cephalad not quite reaching the anterior margin; elytra with a faint bluish shimmer. Head with the eyes much narrower than the pronotum, front rather flat, with a weak longitudinal callus between the eyes toward the clypeus, surface rather smooth, rather densely provided with hair punctures toward the anterior margin of the pronotum. Antennae long and slender, second segment half as long as the third, the third a trifle shorter than the fourth, the seventh to the eleventh with a distinct longitudinal groove on the upper side. Pronotum wider than long, sides barely round and slightly narrowed anteriorly; lateral margins barely impressed in the middle; anterior angles more strongly rounded than the basal angles; disk rather flat, slightly impressed in the middle, before the base; surface smooth, shining; pubescence sparse. Elytra rugose, with a slightly granular effect, with traces of a longitudinal costa. (Male genitalia, see Fig. 1.) Length: 11–12 mm.

Type.—Holotype male, U.S.N.M. 62349.

Type locality.—Lucma, Peru. Collected at 7,000 feet, Aug. 25, 1911, by Yale Peruvian Expedition.

The species is to be readily recognized by the sides of the pronotum, which lack the usual short emargination. It is named in honor of the well-known specialist in Oedemeridae, Dr. Ross H. Arnett, Jr.

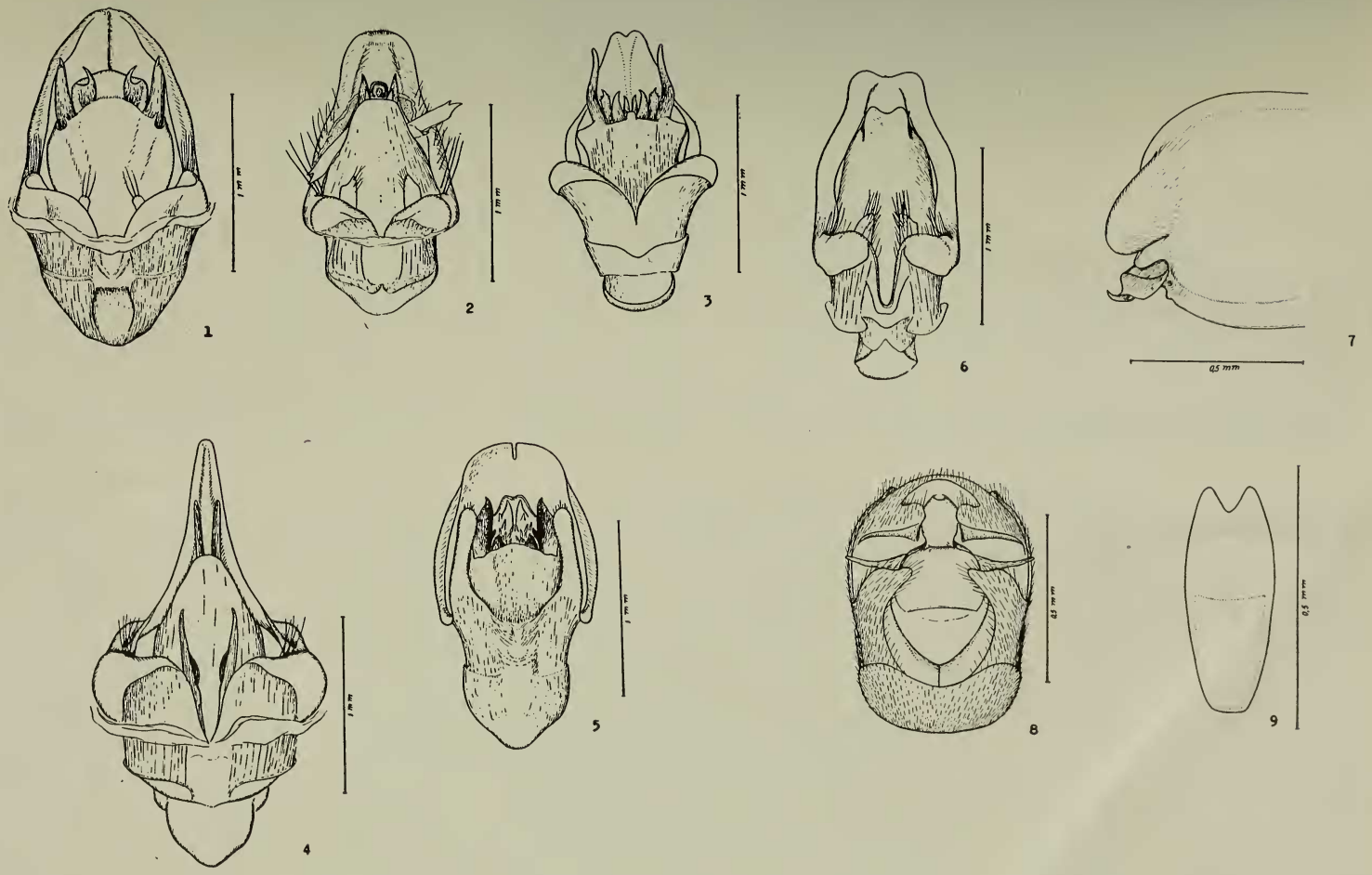
Discodon chapini, n. sp.

MALE. Yellow, head, except the cheeks, and elytra, black, scutellum slightly darkened. Head with the eyes hardly narrower than the pronotum, front slightly convex, surface nearly smooth, somewhat more strongly pubescent toward the anterior margin of the pronotum than between the eyes. Antennae broken off at the 2nd segment. Pronotum somewhat wider than long, sides distinctly narrowed anteriorly; lateral margins with a short distinct emargination in the middle; anterior angles strongly rounded, almost merging with the anterior margin; basal angles nearly rectangular; disk slightly convex, median line absent; surface smooth. Elytra with a granular effect with traces of 2 longitudinal costae. (Male genitalia, see Fig. 2.) Length: 9 mm.

Type.—Holotype male, U.S.N.M. 62350.

Type locality.—"Piches & Perene Vs., Peru. Collected between 2000 and 3000 feet, by Geographical Society of Lima.

[1] 15th contribution to the knowledge of the Neotropical Malacodermata.



FIGS. 1–6.—Male genitalia of: 1, *Discodon arnetti*, n. sp., male; 2, *D. chapini*, n. sp., male; 3, *D. horni* Pic, male; 4, *D. huadquinaense*, n. sp., male; 5, *D. chacoense* Pic ?, male; 6, *D. peruvianum*, n. sp., male. FIG. 7.—Half of the pronotum of *Silis arnetti*, n. sp., male. FIG. 8.—Apex of abdomen, ventrally, of *Malthinus venezuelensis*, n. sp., male. FIG. 9.—Last sternite of *Maltypus minutus*, n. sp., male.

This species is named in honor of Dr. Edward A. Chapin, retired, former chief, Division of Insects, United States National Museum. It is very closely related to *D. horni* Pic, but is to be readily recognized by the all yellow legs. The male genitalia are very different; see also Fig. 3 (of *D. horni*).

Discodon huadquinaense, n. sp.

Male. Yellow-orange, eyes, antennae from the middle of the second segment on, and elytra, black-brown. Head with the eyes narrower than the pronotum, a weak protuberance between the eyes, surface rather densely pubescent, with distinct hair-punctures. Antennae long, reaching beyond the coxae of the hind legs, second segment a little more than half as long as the third, the third a trifle shorter than the fourth, the eighth to the eleventh with a distinct longitudinal groove, which in the eleventh is shorter than in the preceding segments. Pronotum wider than long, anteriorly narrower than at the base, sides distinctly emarginate a little before the middle, from the emargination to the base the sides weakly lobelike, strongly rounded, the anterior part of the sides straighter, median line absent; surface not very strongly pubescent, hair punctures hardly perceptible. Elytra with a rugose effect, with traces of 2 longitudinal costae. (Male genitalia, see Fig. 4.) Length: 11 mm.

Type.—Holotype male, U.S.N.M. 62351.

Type locality.—Huadquina, Peru. Collected at 5,000 feet, July 30, 1911, Yale Peruvian Expedition.

This species has yellow legs, like the foregoing, is related to *D. chaparense* Wittmer which has a similarly shaped pronotum, with the difference that the legs of *D. chaparense* are unicolorously black, by which the new species may be readily separated.

Discodon chacoense Pic ?

A specimen from Lucma, Peru, 7,000 feet, August 25, 1951, collected by the Yale Peruvian Expedition, which lies before me, agrees with Pic's brief description (l'Echange hors-texte **42:** 27, 1926) down to the coloring of the elytra, which, in the present species, are slightly paler on the basal third at the suture. For better recognition of the species hereafter, which is perhaps different from *D. chacoense* and new, I am including a drawing of the male genitalia (Fig. 5).

Discodon peruvianum, n. sp.

Male. Head black, only the cheeks a little paler, antennae and ventral aspect dark brown, scutellum darkened, pronotum and legs yellow, dorsal aspect of the tibiae at the base and the tarsi brown, elytra yellow, base and apex broadly dark-brown, the two dark bands together wider than the yellow middle. Head with the eyes as wide as the pronotum, front shallowly impressed between the eyes, pubescence not very strong, with fine scattered hair punctures. Antennae rather long, segments weakly flattened, the third to the seventh somewhat wider toward the apex than at the base, the remaining segments nearly parallel, the ninth to the eleventh with a fine longitudinal groove. Pronotum somewhat wider than long, sides nearly parallel, weakly notched shortly before the middle, beside the notch the sides are weakly thickened forward and somewhat raised, median line absent, surface nearly smooth, somewhat pubescent. Elytra with a granular effect, with traces of two longitudinal costae. (Male genitalia, see Fig. 6.) Length: 9 mm.

Type.—Holotype male, U.S.N.M. 62352.

Type locality.—"Piches & Perene Vs.," Peru. Collected between 2,000 and 3,000 feet by the Geographical Society of Lima.

Related to *D. brevebasale* Pic, this new species is larger and has the dark coloring at base and apex of the elytra more broadly extended than *brevebasale*.

Polemius unisulcatus, n. sp.

Male. Yellow-brown, head and elytra dark-brown, outermost lateral margin faintly paler in the basal half. Head with the eyes as wide as the pronotum, front between the eyes nearly completely flat, hardly impressed, surface smooth. Antennae rather long, segments nearly parallel, scarcely wider at the distal end than at the base, second segment a little longer than wide, the third as long as the fourth, the fifth a trifle longer than the fourth, the eighth the longest, a little wider than the remaining segments, dorsally with a rather wide deep longitudinal groove which reaches neither the base nor the distal end, somewhat closer to the base than to the distal end, the ninth to the eleventh longer than the seventh, the eleventh even still a little longer than the eighth, all three narrower than the foregoing. Pronotum wider than long, slightly

narrowed forwards, lateral margin weakly thickened in the middle, slightly raised, anterior and basal angles rounded, disk rather flat, middle line on the basal half weakly indicated, surface smooth. Elytra elongate, with a rugose effect. The one front claw with a wide lobe, one middle and hind claw split, one part distinctly shorter than the other and only weakly thickened.

Female. The single specimen before me is colored somewhat darker than the male, antennae brown, the last three segments yellow, base of the middle and hind tibiae and their tarsi a little darkened. Eighth antennal segment simple, without a longitudinal impression, only a little thicker than the ninth. Length: 6.5 mm.

Type.—Holotype male, U.S.N.M. 62353. Allotype in author's collection.

Type locality.—La Merced, Chanchamayo, Peru. Collected at 1,000–1,200 m, December 1908 and February 1909, by Carl O. Schunke.

The marking on the eighth antennal segment well characterizes the species; it belongs to the species of *Polemius* whose antennal segments are not widened toward the distal end.

Silis arnetti, n. sp.

Male. Head black, yellow-orange before the bases of the antennae, these dark with the first three or four segments paler, pronotum and scutellum yellow-orange, the latter lightly darkened toward the apex. Elytra black, sides narrowly rather white-edged, legs yellow, the knee faintly darkened, abdomen yellow, the last 3 or 4 segments dark. Head with the eyes a little narrower than the pronotum, front between the eyes flattened, surface smooth and shining, with fine pubescence like powder. Antennae not very long, first segment only a little thickened toward the distal end, the second only a little longer than wide, the third somewhat longer than the fourth, the fourth and succeeding ones again becoming gradually shorter. Pronotum (Fig. 7) wider than long, rather deeply emarginate before the basal angles, the basal lamella somewhat arcuate, emarginated, and running out into a point that is curved anteriorly, lateral margins thickened before the emargination, rather strongly raised, disk slightly arcuate, surface nearly all smooth, shining and, like the head, with powderlike pubescence. Elytra a little widened posteriorly, with confused rugose punctation.

Female. Coloring as in the male, pronotum simple, without emargination at the basal angles, lateral margins somewhat thickened and raised in the middle. Length: 3.5–4 mm.

Type.—Holotype male, U.S.N.M. 62354. Allotype in the collection of the United States National Museum, Washington; 2 female paratypes, Port of Spain, June 11–13, collected by August Busck, one in U.S.N.M., one in the author's collection.

Type locality.—St. Augustine, Trinidad, British West Indies. Collected on *Cordia*, June 14, 1944, by A. M. Adamson, no. 4166, I.C.T.A. 11813.

Related to *S. barticana* Pic, antennae slenderer, pronotum differently shaped.

Malthinus venezuelensis, n. sp.

Male. Black, only the bases of the antennae, the clypeus, mouth parts, trochanters, and femora are lightened to whitish gray. Head with the eyes considerably wider than the pronotum, still a little wider than the elytra at the humeral calli, front slightly arcuate, surface nearly smooth. Antennae as long as the whole body, segments from the second on widened toward the distal end, from the sixth on the widening again abruptly decreases and the following segments are parallel, the second segment as long as the third, the fourth only a little longer than the third, the fifth and following segments about equal in length to each other, still a little longer than the fourth. Pronotum nearly twice as wide as long, sides parallel, median line distinct, disk slightly arcuate, surface nearly smooth, shining, with isolated hair punctures. Elytra greatly abbreviated, reaching the coxae of the hind legs, with a rugose effect. The last abdominal segment, ventrally; see Fig. 8. Length: about 3 mm.

Type.—Holotype male, U.S.N.M. 62355.

Type locality.—Tacarigua, Venezuela. Type collected March 1, 1949, by M. Villegas, no. 183931.

This species may be placed near *M. diversicornis* Champion, to which it is closely related. The new species is larger and the antennae are longer.

Maltypus minutus, n. sp.

Male. Black-brown, head yellow-orange, tempora faintly darkened, the two basal segment of the antennae and the anterior margin of the pronotum in the middle, a little paler. Tibiae brown, femora somewhat lighter. Head with the eyes wider than the pronotum, front slightly

convex, smooth. Antennae not quite as long as the body, segments only a little thicker at the distal end than at the base, second segment as long as the third, the fourth longer than the third, the fifth still longer than the fourth. Pronotum nearly twice as wide as long, sides nearly parallel, median line indicated, surface nearly smooth. Elytra not reaching the coxae of the hind legs, with a rugose effect. The last sternite (Fig. 9) oblong-oval with a rather deeply and broadly emarginated distal end, in the normal condition, covered more than halfway by the next to the last sternite. The punctate field in the basal half is much less strongly chitinized than the rest and is semitransparent. Length: 2.5 mm.

Type.—Holotype male, U.S.N.M. 62356.

Type locality.—Rio de Janeiro, Brazil. Specimen collected on January 3, 1920, by E. G. Holt.

Apparently this species must be placed in the vicinity of *M. brasiliensis* (Pic) (described as *Malthodes* but very probably belonging to *Maltypus*). *M. brasiliensis* has yellow pronotum and ventral aspect, which parts are dark-colored in the new species.

Maronius centromaculatus, n. sp.

Male. Black-brown, bases of the antennae, the cheeks and frequently also the whole anterior part in front of the antennal bases, the apices of the elytra and the abdomen except the last segment, yellow. Pronotum yellow with a large, nearly rectangular, brown spot which is often somewhat narrowed toward the base and touches neither the basal nor the anterior margin. Front legs frequently somewhat paler. Head with the eyes as wide as the pronotum, front nearly flat, surface nearly smooth. Antennae not very long, the third segment not quite twice as long as the second, the fourth the longest, somewhat longer than the third, the fifth only a little shorter than the third. Pronotum somewhat wider than long, sides nearly parallel, weakly sinuate toward the middle, surface weakly transversely impressed, nearly smooth, pubescence fine. Elytra hardly reaching beyond the coxae of the hind legs, each apex rounded off, an oblique fold on either side beginning under the humerus, running posteriorly toward the middle of the apex, becoming extinct before the apex, surface with an irregularly finely rugose effect. Length: 4–4.5 mm.

Type.—Holotype male, U.S.N.M. 62357. Allotype in the collection of the United States National Museum, paratype in author's collection.

Type locality.—San Salvador de Bahia, Brazil. The specimens were collected on May 28, 1915, by P. G. Russell.

Related to *M. limbatus* Pic which is similarly colored but readily separated therefrom by the proportions of length of the antennal segments, the coloring and formation of the elytra. In *limbatus* the fourth antennal segment is nearly twice as long as the third, the yellow coloring of the apices of the elytra shows up on the sides as a narrow border to beneath the humeral calli and the fold on the elytra is hardly indicated. In *centromaculatus* the fourth antennal segment is only a little longer than the third, the yellow coloring on the elytra is restricted to the apices, and the fold on the elytra is strongly developed.

ZOOLOGY.—*Two new subterranean shrimps (Decapoda: Caridea) from Florida and the West Indies, with a revised key to the American species.* Fenner A. Chace, Jr., U. S. National Museum.

Special thanks for the material and notes on which the following descriptions are based are due to the collectors: Dr. N. T. Mattox, of the University of Southern California; Capt. Merle L. Kuns, of the U. S. Air Force; and Robert B. Cumming, of the University of Florida.

The discovery of two additional shrimps from American subterranean waters and several recent nomenclatural changes (Holthuis, 1947, 1949, and 1950) have made the last published synopsis of these species (Chace, 1943) inadequate. A revised key is therefore offered below.

Typhlatya monae, n. sp.

Fig. 1

Holotype.—Female; Mona Island, Puerto Rico; from well 30 feet deep at "El Molino," about 1 mile southeast of NYA camp at Sardinera; October 11, 1953; collected by Merle L. Kuns; U. S. Nat. Mus. no. 96325.

Paratypes.—Four females; same locality as